



USAID
FROM THE AMERICAN PEOPLE

GLOBAL WATERS



Senegal's only female emptier assists with a fecal sludge emptying operation in a fecal sludge treatment plant (FSTP). Photo credit: WASH-FIN

Scaling Up Financing for Urban Sanitation in Senegal

November 18, 2020

Ibra Sow is the president of VICAS, a successful sanitation service provider (SSP) in Senegal. Ibra began his career in sanitation working as an apprentice driver in his father's family-owned sanitation business. He went on to create VICAS in 2000, with the aim of providing specialized services for onsite and offsite sanitation, road maintenance, and industrial cleaning in Dakar, the country's capital. Today, VICAS has an annual revenue of approximately \$4.5 million, a fleet of 22 trucks and other essential equipment, 29 full-time staff, and 300 seasonal workers, and is one of Senegal's four largest SSPs.

Businesses like VICAS need capital to grow. While traditional sources of financing such as government contracts, user fees, and international grants have supported SSPs in Senegal, a financing gap exists between the current government budget and the total investment needed in the sector. SSPs need access to capital for equipment and sustainable, climate-resilient infrastructure. According to a USAID [Water, Sani-](#)

[tation, and Hygiene Finance](#) (WASH-FIN) survey of 100 SSPs, many providers lack financial expertise and are not well-positioned to grow. Consequently, SSPs have found it challenging to access additional commercial finance to support capital improvements. USAID WASH-FIN meetings with financial institutions showed that local financiers have a limited understanding of investment opportunities in the urban sanitation subsector, and view sanitation projects as risky endeavors from a business perspective. A USAID assessment of the financial landscape further showed that only a small portion of financial institutions had pursued WASH investments in the past.

WASH-FIN is working with SSPs such as VICAS in Senegal to close the sanitation financing gap. In May 2019, with support from WASH-FIN, VICAS received the equivalent of \$1 million in financing from Banque de Dakar to purchase machinery and support day-to-day operations.

The support to VICAS included the design of a new business plan, which also included a capital raising strategy, a financial model, and an analysis of potential investors. An initial assessment of the company's business expansion and fundraising needs showed that VICAS could take on more debt than it presently had. With WASH-FIN's support, VICAS negotiated and selected the most competitive loan offer from a local bank — Banque de Dakar. Through the loan, VICAS furthered its ability to maintain and repair its equipment and infrastructure, thereby improving the quality of sanitation services for the approximately 50,000 households VICAS serves.

“This partnership with USAID WASH-FIN resulted in the most significant loan closing in my career and increased my confidence in the potential for VICAS. I am now looking to expand VICAS operations in the region, in Guinea, Côte d'Ivoire, and Togo, as I already have strong partnerships with private sector actors in those countries,” notes Ibra.

Senegal's Sanitation Sector

Senegal is among the few African countries with a WASH institutional framework that has been successful in extending services by embracing private sector participation. Despite this success, only 21 percent of the population had access to safely managed sanitation services in 2019, according to UNICEF estimates. Currently, the government is working to expand this model, but the expansion is at risk due to financial constraints, with UNICEF estimating a \$329 million government budget gap. With more than half of the population lacking services, and public funding coming up short, expanded sources of funding are needed. But traditional banks and microfinance institutions are not yet ready to finance the sector at scale. Service providers are also not sufficiently prepared to engage with these institutions.

To improve the delivery of urban sanitation services, USAID WASH-FIN is helping ONAS, the Association des Acteurs de l'Assainissement au Sénégal (Association of Sanitation Operators) finalize a market-structuring strategy to identify private sector SSP opportunities in urban areas outside Dakar. In support of this strategy, the program undertook a study of best practices in public-service market structuring and analyzed the potential market size that would be necessary to establish a profitable subsector.

In Senegal, WASH-FIN is also working with the local commercial banking sector to increase its understanding of sanitation investment opportunities, and to grow the evidence-base that documents such opportunities. To achieve this, the program has hosted knowledge-sharing events and led a landscape review to explore a broad array of financing opportunities. As a result of continuous engagement with the potential pool of financiers, 15 Senegalese banks and three multinational banks or investment funds have openly expressed interest in the urban sanitation sector. In addition to the \$1 million in financing that VICAS received, new transactions exceeding \$6 million are currently under negotiation with other institutions.

Commercial lenders have stringent credit requirements for SSPs. Designed to meet the different needs and skill sets of large and small SSPs, WASH-FIN technical assistance focuses on increasing access to finance to expand urban service delivery. This support consists of: assessing creditworthiness; refining technical proposals; preparing financial models; and matching SSPs with suitable financing institutions.

“It is important to work with both financial institutions and service providers in order for both parties to have a better understanding of what is needed in terms of expanding WASH services and the key investment opportunities and what is required to mobilize private finance,” emphasized Jeff Goldberg, Director of the Bureau for Resilience and Food Security Center for Water Security, Sanitation, and Hygiene at USAID.

Converting Waste into Energy

In addition to VICAS, the program also supported another SSP, Delvic, in the commercialization of the Janicki Omni Processor (J-OP), a new waste-to-energy sanitation technology that is being piloted outside of Dakar. Given that only 21 percent of the Senegalese population has access to safely managed sanitation, investment is needed in new sanitation treatment options with the potential to expand services for entire communities. The J-OP is unique in that it processes sanitation waste, removing the pathogens, and produces energy, water, and ash as by-products. This technology is expensive compared to existing systems, but the ability to sell the by-products, or use them for industrial purposes, holds promise in terms of improving affordability for waste treatment. With additional capital, Delvic hopes to scale up the technology throughout Senegal. To help Delvic move the piloted J-OP to a commercially viable scale, USAID WASH-FIN prepared a market-based financial model using debt and equity sources. To date, grant capital has funded pilot operations, and the program has been working with Delvic and relevant stakeholders to raise additional capital.

In addition to supporting some of the largest SSPs in Senegal, the program is working to better understand the financial history, capacity, and interest of smaller SSPs in accessing financing. In partnership with ONAS and targeted financial institutions, WASH-FIN is supporting the development of a Fleet Renewal Program that would help replace aging sanitation trucks under affordable financing conditions. This multi-million-dollar fund is currently under negotiation, and, once finalized, is expected to mobilize investment to expand and increase the efficiency of service delivery.

Implications for Future Interventions in Senegal and Globally

In Senegal, USAID WASH-FIN is building on a strong foundation of government leadership, development partner support, learning, and vision that has positioned the country at the forefront of affordable sanitation service provision with private sector participation globally. By expanding local financing options, government budgets will be more efficient in leveraging domestic private capital. Most importantly, Senegalese citizens receive improved and appropriately priced services, and their health and the environment will benefit.

While few countries have a sector set-up with such intensive private participation, Senegal's leveraging of its successful experience in water supply public-private partnerships (PPPs) to address the sanitation challenge shows that with political will and commitment, lessons from one sub-sector can be adapted to others. In this case, the government budget and local private capital are used more efficiently and blended through the public-private partnership (PPP) mechanism to improve services. When considering the alternatives of prohibitively expensive traditional networked sewerage and treatment systems, this solution is also practical and appropriate vis-a-vis the physical composition of dense urban areas and the local economic base.

In countries that lack a history of PPPs in WASH, bold leadership, strong governance, and appropriate incentives will be required to manifest a similar improvement in sanitation. For example, in Kenya, USAID supported an SSP to scale up its operations. The program worked with Sanivation to increase access to sanitation in low income areas and non-sewered urban areas. In South Africa, WASH-FIN helped connect a local technology company with a potential investor. In both Kenya and South Africa, the technology used by the SSPs is largely domestic and not prohibitive in terms of capital costs. Both of these experiences will be detailed in upcoming case studies that can be accessed on Globalwaters.org. To bring more advanced and higher cost treatment technologies like the J-OP into a market, it may be necessary to look at financing options beyond water PPPs, and look at other sectors for comparative learning (for example, the experience of financing innovative renewable energy or microgrid technologies).

Providing access to the 2 billion people globally that presently do not have basic sanitation facilities will undoubtedly pose a great challenge. The implications of inadequate or nonexistent sanitation are significant, with economic losses estimated at between 1–2.5 percent of GDP across 18 African countries, or as high as \$5.5 billion per year. In rapidly urbanizing countries, relying on old thinking will not be enough; Senegal has shown this. With its successful model of public and private sector partnerships, Senegal is expected to continue to lead in bringing new technologies into the sanitation sector.

By Farah Siddique and Stephen Sena, USAID WASH-FIN



This article appears in Global Waters, Vol. 11, Issue 5 for past issues of the magazine, visit Global Waters' homepage on Globalwaters.org.

For more information, please visit Globalwaters.org.